## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
Amendment of Parts 13 and 80 of the Commission's Rules Concerning	)	WT Docket No. 00-48
Maritime Communications	)	
Petition for Rule Making Filed by Globe Wireless, Inc.	)	RM-9499
Amendment of the Commission's Rules Concerning Maritime Communications	) ) )	PR Docket No. 92-257

## Comments by:

## Owen Anderson, GMDSS Instructor and Consultant

#### and

### Kurt Anderson, GMDSS Instructor and Consultant

Submitted January 5, 2007

Owen Anderson's professional career in the field of maritime communications spans the period from 1945 through 1990. My involvement with GMDSS began in June of 1998. I am a member of the National GMDSS Task Force and chair of the training group. Kurt Anderson's professional career in the field of maritime communications spans the period from 1979 through 1999. My involvement with GMDSS began in 1999. I am a member of the National GMDSS Task Force training group.

We respectfully submit the following comments concerning this proceeding for your consideration.

The docket lists the following item on Page-40, pp-75 and invites comments:

## G. Testing of GMDSS Radio Equipment

75. We propose to add a rule to Subpart W of Part 80 to clarify that vessels subject to the Subpart W GMDSS requirements are required to test their radiotelephone equipment on a daily basis. Section 80.869, 47 C.F.R. § 80.869, imposes a daily testing requirement, but that Subpart R rule, although formerly applicable to all GMDSS vessels, is no longer applicable to vessels governed by Subpart W. Since it was never the Commission's intention to relieve Subpart W GMDSS vessels of the daily testing requirement, we believe it is appropriate to set forth that requirement in a Subpart W rule. We invite comment on this proposal. In the interim, we encourage the continued testing of GMDSS radiotelephone equipment.

We support this small step towards clarifying the requirement for GMDSS equipment testing.

Unfortunately, it does not adequately deal with the problem of the rules concerning equipment testing of compulsory equipped vessels. The current rules are both fragmented and contradictory.

There are numerous sections in Part-80 governing equipment tests for compulsorily equipped vessels.

- Subpart C: Operating Requirements and Procedures.
   Sec. 80.101 Radiotelephone testing procedures.
- ➤ Subpart I: Station Documents. Sec. 80.409 Station logs. 80.409 (e)(3)(5)(9)(10)(11)
- Subpart R: Compulsory Radiotelephone Installations for Vessels 300 Gross Tons.
   Sec. 80.869 Test of radiotelephone station.
- Subpart S: Compulsory Radiotelephone Installations for Small Passenger Boats.
   Sec. 80.931 Test of radiotelephone installation.
- Subpart T: Radiotelephone Installation Required for Vessels on the Great Lakes.
  Sec. 80.971 Test of radiotelephone installation.

- Subpart U: Radiotelephone Installations Required by the Bridge-to-Bridge Act.
  Sec. 80.1023 Test of radiotelephone installation.
- Subpart W: Global Maritime Distress and Safety System (GMDSS).
   80.1095 Survival craft equipment and 80.1099 Ship sources of energy (f)(2).

Existing rules on GMDSS equipment testing are covered in:

Subpart W: Sec. 80.1095 Survival craft equipment.

(c) Survival craft equipment must be tested at intervals not to exceed twelve months. Sec. 80.1099 Ship sources of energy. (f) (2) Battery charge levels should be checked at intervals of 30 days or less with equipment turned ON and the battery charger turned OFF. Portable equipment with primary batteries such as EPIRBs and SARTs should be checked at the same intervals using methods recommended by the manufacturer. The results of battery checks should be recorded in the radio log.

Subpart I: Sec. 80.409 Station Logs. (e) Ship radiotelephone logs.

- (3) An entry that pre-departure equipment checks were satisfactory and that required publications are on hand. Daily entries of satisfactory tests to ensure the continued proper functioning of GMDSS equipment shall be made.
  - (5) A weekly entry that:
- (i) The proper functioning of digital selective calling (DSC) equipment has been verified by actual communications or a test call; (See comments below)
  - (ii) The batteries or other reserve power sources are functioning properly;
- (iii) The portable survival craft radio gear and radar transponders have been tested; and

- (iv) The EPIRBs have been inspected.
- (9) Results of required equipment tests, including specific gravity of lead-acid storage batteries and voltage reading of other types of batteries provided as a part of the compulsory installation;
  - (10) Results of inspections and tests of compulsorily fitted lifeboat radio equipment;
- (11) A daily statement about the condition of the required radiotelephone equipment, as determined by either normal communication or test communication;

Survival Craft Equipment includes the EPIRB. Sec. 80.1095(a)(b) describe carriage requirements for Radar Transponders (SART) and VHF Radiotelephones. The 12 month interval listed for those devices in 80.1095(c) is in conflict with other rules stating different intervals for testing this equipment. (80.1099(f)(2) and 80.409 (e)(5)(iii). Sec. 80.1099(f)(2) uses the term "Portable equipment with primary batteries such as EPIRB's and SARTs". Presumably this would also include VHF 2-way radiotelephones. The interval listed here is 30 days. This 30 day interval is in conflict with 80.409 (e)(5)(iii) which still requires a weekly test for the VHF radiotelephones and radar transponders.

## From the docket:

Sec. 80.409: It is proposed to delete (e)(5)(ii) requiring a weekly emergency battery test and change (iii) and (iv) to (ii) and (iii). Further it is proposed to add a new paragraph (6) and renumber the old paragraphs 6-12 as 7-13.

(f)(6) An entry at least once every thirty days that the batteries or other reserve power sources have been checked and are functioning properly.

Comment: The above changes are the result of original comments filed arguing that a weekly test of the survival craft radios and radar transponders was too frequent and would result in depletion of the batteries. This position was originally rejected but reconsidered in the latest round. Unfortunately the revision was applied only to (ii) covering the reserve power source batteries. Paragraph (iii) covering survival craft radios and radar transponders was left untouched. This is in conflict with 80.1099 (f)(2) which requires a monthly test.

As a result of the above we have confusing and conflicting rules governing GMDSS equipment testing. Simply adding a new section to Subpart-W requiring a daily test of the radiotelephone equipment does not address the problem.

Proposed Solution: All the required equipment tests for compulsory equipment should be listed in a single new section. Since GMDSS has the highest requirements for testing it would be vastly preferable to have a separate listing under Subpart-W. If this is deemed unworkable all compulsory testing requirements could also be a new section in Subpart-C adjacent to or part of 80.101. References to this master list of equipment test requirements would then be inserted in the Subparts R and W and others as appropriate. We would be willing to offer alternatives if either of these is unacceptable.

New Section: 80.1xxx Equipment tests. All required equipment shall be tested in accordance with this section and logged in accordance with 80.409 (e)(3)(4)(6)(7)(8).

- (a) Pre-departure. All required equipment shall have the same tests as required in 80.1xxx (b). Additionally, an inspection shall be made to determine that the following items, if required, are available onboard the vessel: Note: The pre-departure requirement shall only apply once per day if the vessel makes multiple arrivals and departure in a single day.
  - (1) All required documents and publications.
  - (2) Survival Craft Radios
  - (3) Radar Transponders (SART)
  - (4) EPIRB
- (b) Daily tests of the following equipment, if required to be carried, unless the normal use of the required equipment demonstrates that the equipment is operating. When these tests are performed by a person other than the master and the equipment is found to be defective the master must be promptly notified.
  - (1) All Radio Telephone Equipment other than survival craft radios.

- (2) Digital Selective Calling (DSC) equipment.
- (3) Inmarsat-C Terminal.
- (4) NBDP Equipment.

- (5) NAVTEX
- (6) Battery charging equipment. Record meter readings for voltage and charging current if available.
- (c) Monthly equipment tests:
  - (1) Survival Craft Radios
  - (2) Radar Transponders (SART)
  - (3) EPIRB
- (4) The GMDSS equipment or other compulsory equipment should be tested with the ship's AC supply turned OFF to ensure operation solely from the emergency batteries. While operating on battery power, the specific gravity of each cell in lead-acid batteries and the voltage readings of each cell (if accessible) in other types of batteries shall be checked and the results entered in the log.

<u>Comment</u>: Current rules require only a weekly test of the DSC function but a daily test of the radiotelephone equipment. Since the DSC function is the primary technology for sending and receiving terrestrial distress alerts: its testing schedule should be the same as for the radiotelephone equipment, daily and pre-departure.

With reference to (c)(4) requiring monthly check of equipment operating solely from batteries—we have taught GMDSS material on board 2 vessels neither of which could operate their console from the emergency batteries. We are also aware of another notorious incident where a large tanker had gone through 5 annual inspections before it was discovered that there was no battery charger installed. Further, the ship's crew apparently failed to wonder why their batteries were always failing.

Subpart-I: Sec. 80.409(e)(3) revised as follows: An entry that all required equipment checks were performed in accordance with 80.1xxx and were satisfactory. When the tests are performed by a person other than the master and the equipment is found to be defective the master must be promptly notified and the time of notification entered in the log. (Note: 80.1xxx indicates the new section containing the list of equipment tests and their schedule)

- (4) An entry describing any malfunctioning GMDSS equipment and another entry when the equipment is restored to normal operation. (5)(ex-6) The time of any inadvertent transmissions of distress, urgency and safety signals including the time and method of cancellation.
- (6)(ex-7) At the beginning of each watch, the Officer of the Navigational Watch, or GMDSS Operator on watch, if one is provided, shall ensure that the navigation receiver is functioning properly and is interconnected to all GMDSS alerting devices which do not have integral navigation receivers, including: VHF DSC, MF DSC, satellite EPIRB and HF DSC or INMARSAT SES. On a ship without integral or directly connected navigation receiver input to GMDSS equipment, the Officer of the Navigational Watch, or GMDSS Operator on watch, shall update the embedded position in each equipment. An appropriate log entry of these actions shall be made.
- (7)(ex-8) A GMDSS radio log entry shall be made whenever GMDSS equipment is exchanged or replaced (ensuring that ship MMSI identifiers are properly updated in the replacement equipment), when major repairs to GMDSS equipment are accomplished, and when annual GMDSS inspections are conducted.

(8)(ex-12) When the master is notified about improperly operating radiotelephone equipment.

Subpart R: Sec. 80.869 Equipment Tests.

Subpart S: Sec. 80.931 Equipment Tests.

"All required equipment shall be tested in accordance with 80.1xxx and logged in accordance with 80.409 (e)(3)(8)."

**Subpart W:** Delete 80.1095 (c) and 80.199(f)(2).

If the proposed 80.1xxx listing equipment tests is located under Subpart-W it can be

entered in its entirety under any available number.

If 80.1xxx is located elsewhere the following rule should be inserted under any available

number:

"All required equipment shall be tested in accordance with 80.1xxx and logged in

accordance with 80.409 (e)(3)(4)(6)(7)(8)."

**Summary:** We wish to emphasize the importance of resolving the issues concerning

equipment testing that will remove existing contradictions and simplify the resulting

rules.

Thank you for your consideration of these comments.

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